VEL TECH RANGA SANKU ARTS COLLEGE

AVADI, CHENNAI – 600 062.

(Affiliated to University of Madras)

SSM FITHUB

MINI PROJECT REPORT

Submitted by

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In partial fulfillment for the award of degree

of

BACHELOR OF SCIENCE
IN

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VEL TECH RANGA SANKU ARTS COLLEGE

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BONAFIDE CERTIFICATE

This is to certify that the mini project report entitled ***SSM FITHUB*** is a bonafide record of the project work done by Sanjay R , Manogaran R, Sakthivel R, during the academic year 2022-2023 towards the partial fulfillmentof the requirement of the award of B.Sc. Degree in ***COMPUTER SCIENCE.***

Guided by

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Department of Computer Science

Head of the Department

Computer Science

Internal Examiner

External Examiner

ACKNOWLEDGEMENT

The satisfaction accompanies that the successful completion of any task would be incomplete without mentioning the people whose ceaseless cooperation made it possible, whose constant guidance and encouragement crown all efforts with success.

We give all honor and praise to GOD ALMIGHTY who gave as wisdom and guided us during the entire course of our project.

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ABSTRACT

Mini Project: Creating Website for Gym Management

Project Title: SSM FITHUB

WEB APPLICATION is a robust and user-friendly web application designed to streamline and enhance the management of fitness centers and gyms. The system aims to automate key aspects of gym operations, including member management, fee tracking, trainer allocation, and activity monitoring. By leveraging modern web technologies, GYM MANAGEMENT offers a seamless and efficient solution for both gym administrators and members. It is the ideal solution for gym owners looking to modernize their operations, improve member satisfaction, and optimize resource allocation. With its user-friendly interface and comprehensive feature set, It sets a new standard for gym management systems, ensuring a seamless experience for both administrators and gym enthusiasts

Keywords: *Login, Logout, User details*.

CHAPTER 1

1. INTRODUCTCION

SSM FITHUB emerges as a pioneering web application tailored to revolutionize the management of fitness centers and gyms. Engineered with robustness and user-friendliness in mind, this system is poised to streamline and elevate gym operations to new heights. Its primary goal is to automate key facets of gym management, ranging from member administration and fee tracking to trainer allocation and activity monitoring.

By harnessing the power of contemporary web technologies, SSM FITHUB delivers a seamless and efficient solution that caters to the needs of both gym administrators and members alike. It stands as the quintessential solution for gym proprietors seeking to modernize their operations, elevate member satisfaction levels, and optimize resource allocation strategies.

Distinguished by its user-friendly interface and comprehensive feature set, SSM FITHUB sets a new benchmark in the realm of gym management systems, promising a seamless experience for administrators and gym enthusiasts alike..

CHAPTER 2

2. SYSTEM ANALYSIS

2.1 REQUIREMENT ANALYSIS

This phase is done for understanding what all are the improvements needed by the user for overcoming the drawbacks of the current system. The problem could be automating an existing manual process, developing a new automated system, or combination of these two.

The emphasis in the requirement analysis is to identify what are the users expect from the system, not how the system will achieve those requirements. If the client and developers don't understand the limitations of the system and failed to know the actual aim for developing the new one, i.e., if requirement analysis is not properly done, it will lead to an inefficient system. So, before starting design, we should analyze the system and collect data from users, which are useful to our project. It must be able to get the answers of the following questions.

- Who will use our system?
- What are they expecting from our site?
- What are their basic needs?

2.2 REQUIREMENT SPECIFICATION

The process of establishing the services, the system should provide and the constraints under which it should operate is called requirement analysis. System requirements should set out what the system must do rather than how it is done. A requirement definition is a statement in natural language plus illustration, which defines the constraints under which the proposed system must operate. The document is also called functional specification. It serves as a contract between the system user and software developer.

Firstly, a requirement definition is written and then it is expanded to requirement specification. The software design is based directly on the requirement specification documents must specify all functional and performance requirements.

2.3 FEASIBILITY STUDY

Feasibility study is a procedure that identifies, describes and evaluates candidate system and selects the best system for the job. An estimate is made of whether the identified user needs may be satisfied using current software and hardware technologies. The study will decide if the proposed system will be cost effective from a business point of view and if it can develop given existing budgetary constraints. The key considerations involved in the feasibility analysis are economic, technical, behavioral and operational.

2.3.1 ECONOMIC FEASIBILITY

The economic analysis is to determine the benefits and savings that are expected from the candidate system and compare them with cost. The system is economically feasible, as the organization possesses the hardware and software resources required for the functioning of the system. Any additional resources, if required it can also be easily acquired.

2.3.2 TECHNICAL FEASIBILITY

It centers on the existing computer system and to what extent it can support the proposed addition. Since the minimum requirements of the system like IIS of the server and a browser on the client, are met by any average user.

2.3.3 OPERATIONAL FEASIBILITY

The system operation is the longest phase in the development life cycle of a system. So, operational feasibility should be given much importance. The users of the system don't need through training on the system. All they are expected to know to operate the system is the basic netsurfing knowledgably interface.

2.3.4 BEHAVIOURAL FEASIBILITY

In today's world, where computer is an inevitable entity, the system like auction site, which requires no special efforts than surfing the net are enjoying wide acceptance. Thus, the organization is convinced that the system is feasible.

CHAPTER 3

3. SYSTEM DESIGN

The most creative and challenging of the system life cycle is system design. The term design describes a final system and the process by which it is developed. The designphase focuses on the detailed implementation of the system recommended in the feasibility study.

3.1 PROJECT MODULES

There are 10 modules presented in our project. They are listed below here:

- *Login*
- *Home*
- *Dashboard*
- *Member*
- *Payment*
- *Health status*
- *Plan*
- *Overview*
- *Exercise routine*
- *Password Reset*

ADMIN MODULES & SUB MODULES

Admin is the authority who have right to manage whole operation of the website.

- *Login*
- *Dashboard*
- *Member*
    - *Add member*
    - *Manage member*
- *Payment*
- *Health status*
- *Plan*
    - *New plan*
    - *Edit subscription plan*
- *Overview*
    - *Member per month*
    - *Member per year*
    - *Income per month*
- *Exercise routine*
    - *Add routine*
    - *Edit routine*
    - *View routine*
- *Change password*

DATA DICTIONARY

Table 1: ADMIN LOGIN

Column name	Data type	Constraints	Size
Id	Int	PRIMARY KEY	11
Username	Varchar	NOT NULL	255
Email	Varchar	NOT NULL	255
Password	Varchar	NOT NULL	255
Fname	Varchar	NOT NULL	255
Iname	Varchar	NOT NULL	255
Gender	Varchar	NOT NULL	255
Dob	Varchar	NOT NULL	255
Contact	Int	NOT NULL	255
Address	Varchar	NOT NULL	500
Image	Varchar	NOT NULL	2000
Creation Date	Timestamp	NOT NULL	Default size
Updation Date	Varchar	NOT NULL	255

Fig 3.2.1

Table 2: ADDRESS

Column name	Data type	Constraints	Size
Id	Int	PRIMARY KEY	11
StreetName	Varchar	NOT NULL	255
State	Varchar	NOT NULL	Default size
City	Varchar	NOT NULL	Default size
Zipcode	Varchar	NOT NULL	255

Fig 3.2.2

Table 3: ENROLLS_TO

Column name	Data type	Constraints	Size
Et_Id	Int	PRIMARY KEY	11
Pid	Varchar	NOT NULL	11
Uid	Varchar	NOT NULL	255
Paid_date	Varchar	NOT NULL	11
Expire	Varchar	NOT NULL	Default size
Renewal	Varchar	NOT NULL	50

Fig 3.2.3

Table 4: HEALTH STATUS

Column name	Data type	Constraints	Size
Hid	Int	PRIMARY KEY	11
Calorie	Varchar	NOT NULL	11
Height	Varchar	NOT NULL	255
Weight	Varchar	NOT NULL	Default size
Fat	Varchar	NOT NULL	Default size
Remarks	Varchar		
Uid	Varchar		

Fig 3.2.4

Table 5: LOGS

Column name	Data type	Constraints	Size
Id	Int	PRIMARY KEY	11
Userid	Varchar	NOT NULL	20
Action	Varchar	NOT NULL	40
Date	Datetime	NOT NULL	Default size

Fig 3.2.5

Table 6:MANAGE WEBSITE

Column name	Data type	Constraints	Size
Id	Int	PRIMARY KEY	11
Title	Varchar	NOT NULL	600
Short_title	Varchar	NOT NULL	600
Logo	Varchar	NOT NULL	Default
Footer	Varchar	NOT NULL	255
Currency_code	Varchar	NOT NULL	600
Currency_symbol	Varchar	NOT NULL	600
Login_logo	Varchar	NOT NULL	255
Invoice_logo	Varchar	NOT NULL	255
Background_login_image	Varchar	NOT NULL	255

Fig 3.2.6

Table 7: Plan

Column name	Data type	Constraints	Size
Pid	Varchar	PRIMARY KEY	8
PlanName	Varchar	NOT NULL	20
Description	Varchar	NOT NULL	200
Validity	Varchar	NOT NULL	20
Amount	Int	NOT NULL	10
Active	Varchar	NOT NULL	255

Fig 3.2.7

Table 8: TABLE EMAIL CONFIG

Column name	Data type	Constraints	Size
Eid	Int	PRIMARY KEY	21
Name	Varchar	NOT NULL	500
Mail_drive_host	Varchar	NOT NULL	5000
Mail_Port	Int	NOT NULL	50
Mail_username	Varchar	NOT NULL	50
Mail_password	Varchar	NOT NULL	30
Mail_encrypt	Varchar	NOT NULL	300

Fig 3.2.8

Table 9: TIME TABLE

Column name	**Data type**	**Constraints**	**Size**
Tid	Int	PRIMARY KEY	11
Tname	Varchar	NOT NULL	255
Day1	Varchar	NOT NULL	255
Day2	Varchar	NOT NULL	255
Day3	Varchar	NOT NULL	255
Day4	Varchar	NOT NULL	255
Day5	Varchar	NOT NULL	255
Day6	Varchar	NOT NULL	255

Fig 3.2.9

Table 10: USERS

Column name	Data type	Constraints	Size
Userid	Varchar	PRIMARY KEY	11
Username	Varchar	NOT NULL	255
Gender	Varchar	NOT NULL	16
Mobile	Varchar	NOT NULL	255
Email	Varchar	NOT NULL	255
Dob	Varchar	NOT NULL	255
Joining_date	Varchar	NOT NULL	11

Fig 3.2.10

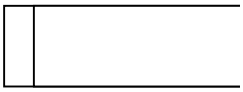
3.2 DATA FLOW DIAGRAM

The DFD is a network representation of the system. They are excellent mechanism for communicating with customers during requirement analysis. A DFD, also known as bubble chart, which clarify system requirements identifying major transformations. It is the starting point in the system design and decomposes the requirement specification down to the lowest level.

A DFD represents data flow between individual statement and blocks of statement in a routine, data flow between sequential routines, data flow between concurrent processes or a distributed computing system where each node represents a geographically remote processing unit. DFD are quite valuable for establishing naming conventions and names of systems, files, and data links. It describes what flow rather than how they are proposed, so it doesn't depend on hardware, software and data structures or file organizations.

NOTATIONS USED

The logic data flow diagram can be drawn using four simple notations (i.e.) special symbols or icons and the notations that associates them with a specific system. The notations are specified below:

ELEMENT	REFERENCES
SYMBOLS	
Data flow process	
Source or Sink	
Process	
Data storage	

DESCRIPTION

***Process**: Describes how input data is converted to output data.*

***Data Store**: Describes the repositories of data in a system.*

***Data Flow**: Describes the data flowing between process, stores and external entities.*

***Sources**: An external entity causing the origin of data.*

Sink: An external entity, which consumes the data.

DFD: LEVEL 0

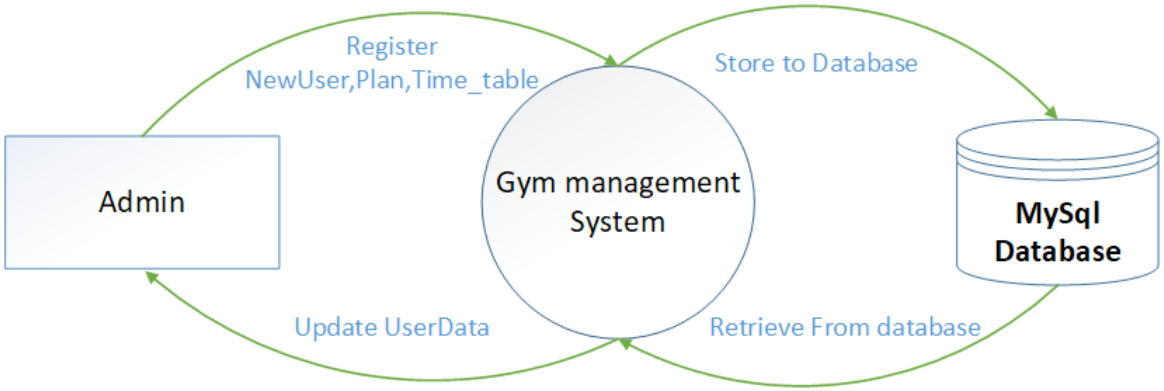


Fig 3.3.1

1st level DFD for Admin Processes

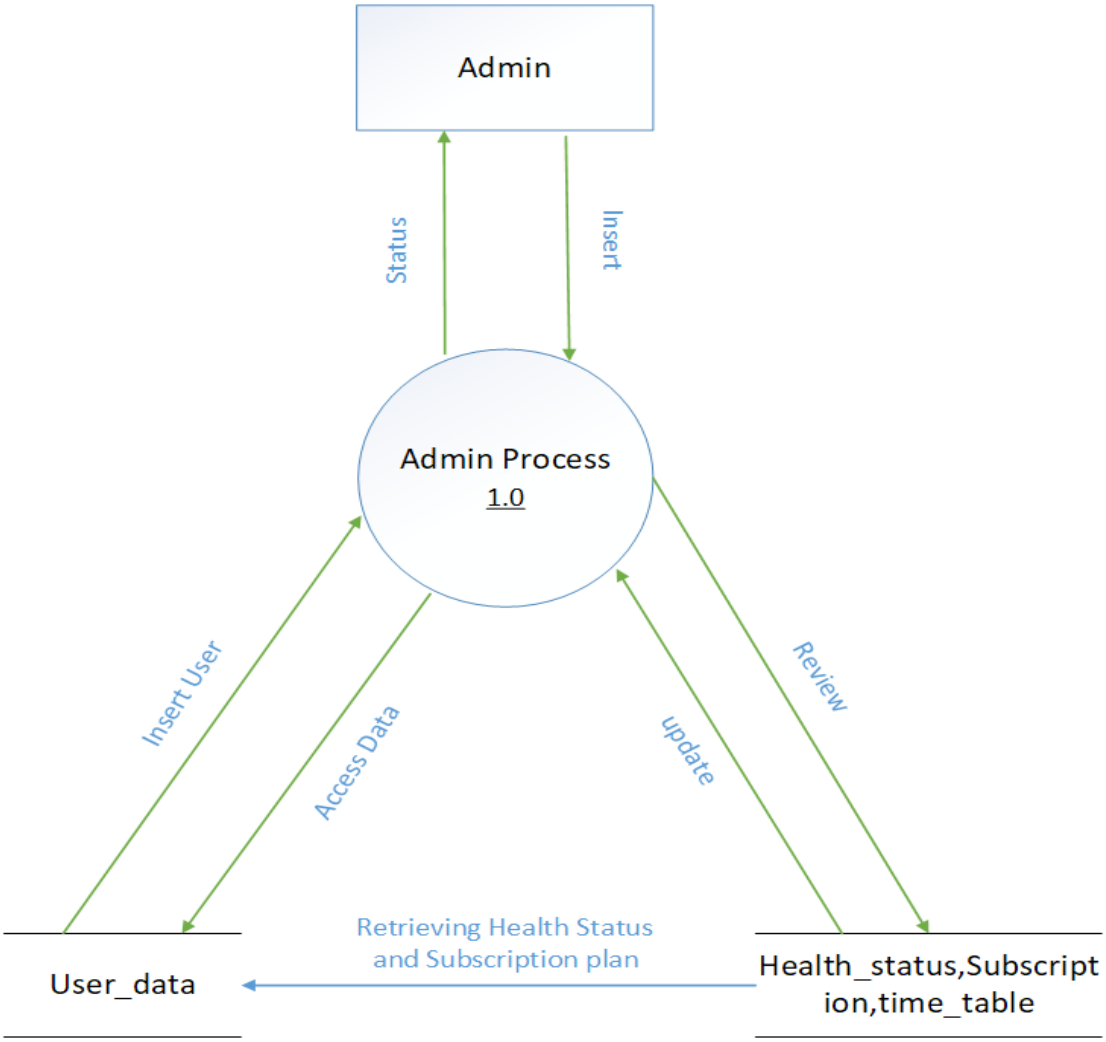


Fig 3.3.2

DFD For User Registration and Profile Update

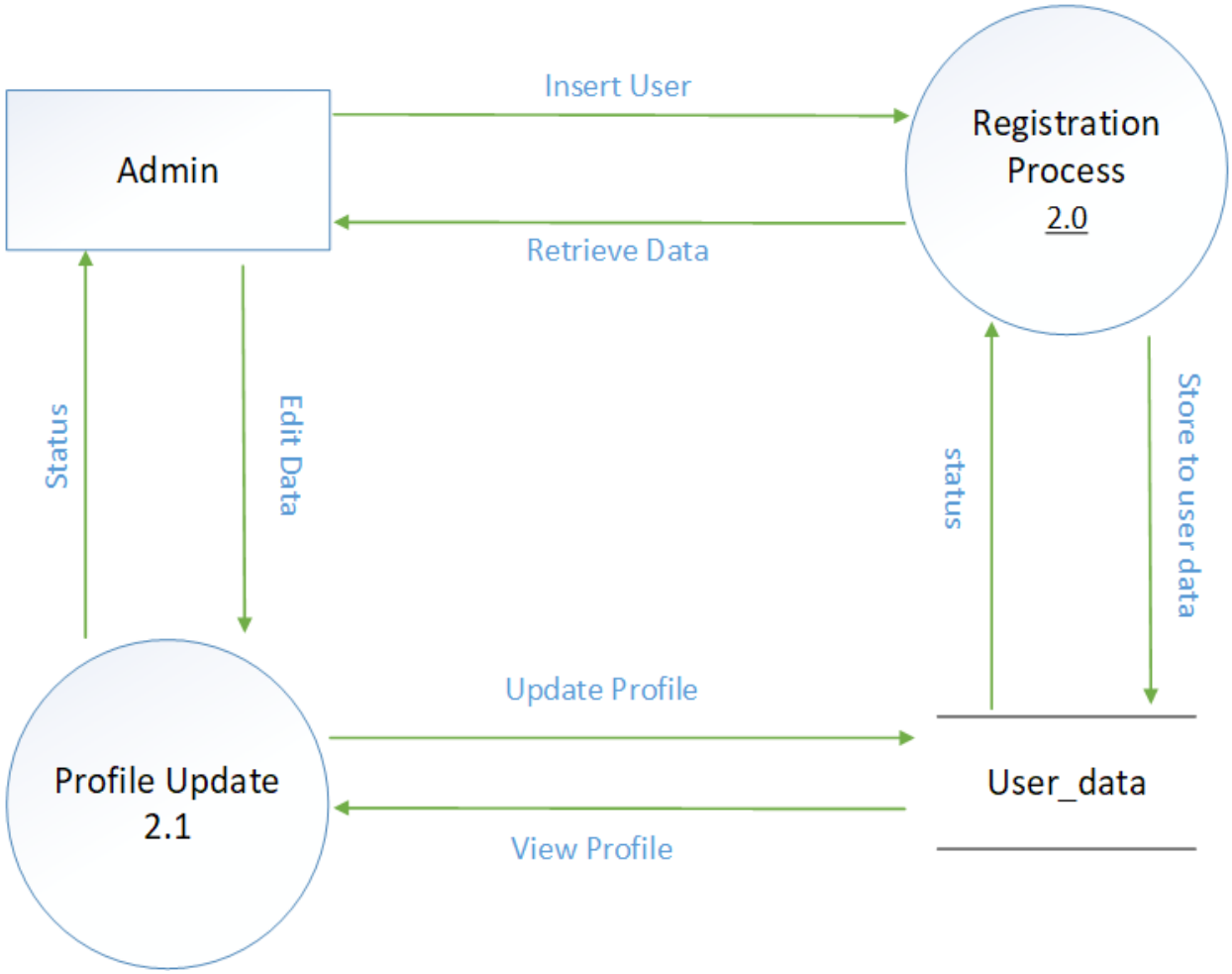


Fig 3.3.3

DFD for Manage Timetable/Plan

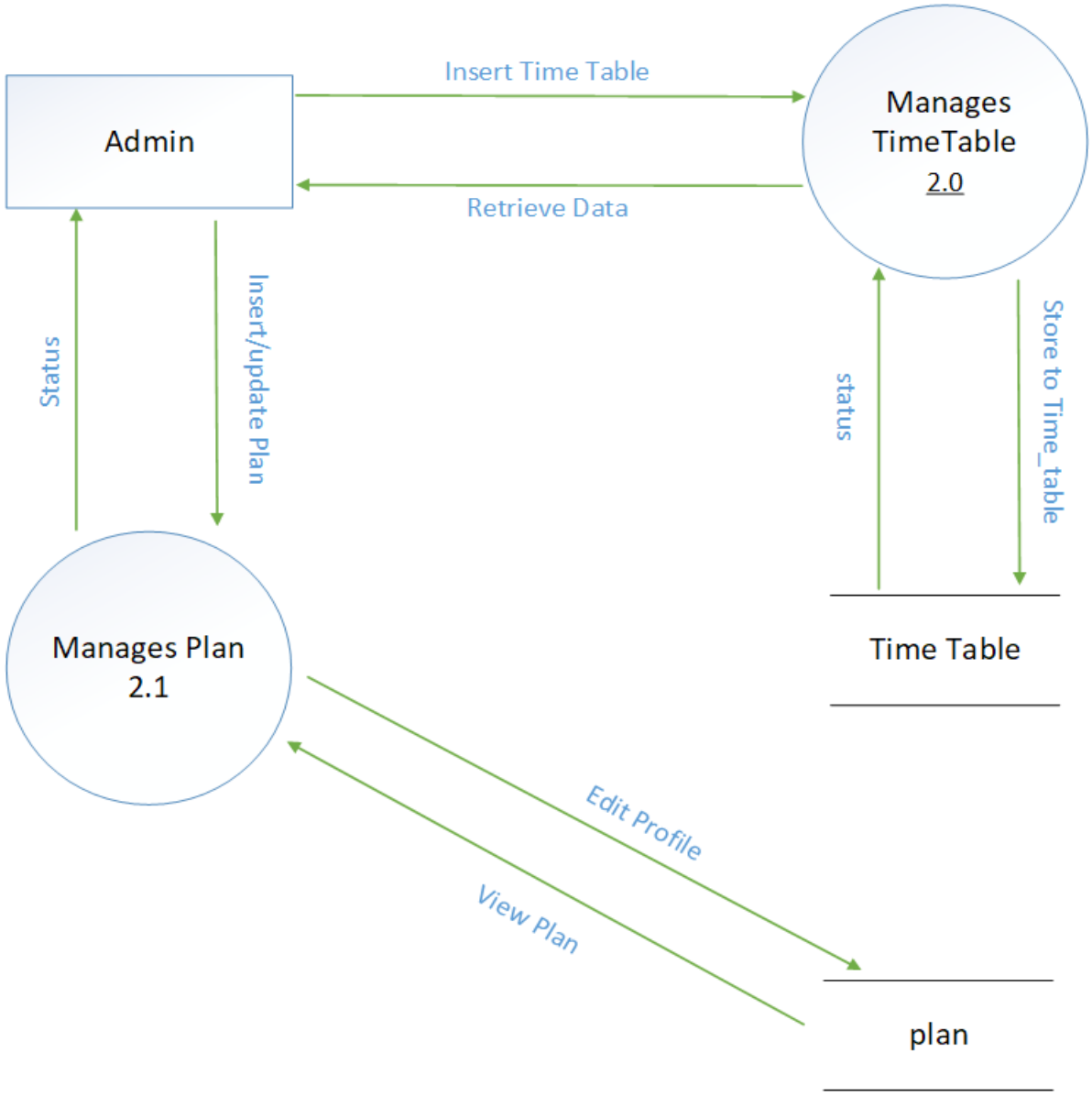


Fig 3.3.4

3.3 HARDWARE AND SOFTWARE SPECIFICATION

3.4.1 Hardware Specification

- Type of Device Used : LAPTOP (Lenovo x64-based processor)
- Processor : AMD PRO A4-4350B R4, 5 COMPUTE CORES 2C + 3G 2.50 GHz

Memory

- Primary : 4.00 GB RAM (3.84 GB Usable)
- Secondary : 500 GB Hard Disk Drive (465.76 GB Usable)

- Monitor : LED
- Keyboard : 104 KEYS

Pointing Device

- Mouse : Two or Three Button

3.4.2 Software Specification

- *Operating System* : *Windows 10 Pro*
- *Front end* : *PHP, HTML, CSS, JavaScript.*
- *Back end* : *MySQL Server*

CHAPTER 4

4. SOFTWARE TOOLS USED

FRONT END

- PHP (Hypertext Pre – Processor)

PHP is a general - purpose scripting language geared toward web development. It was originally created by Danish - Canadian programmer Rasmus Lerdorf in 1993 and released in 1995. The PHP reference implementation is now produced by The PHP Group. PHP was originally an abbreviation of Personal Home Page, but it now stands for the recursive initialism PHP: Hypertext Preprocessor. PHP code is usually processed on a web server by a PHP interpreter implemented as a module, a daemon or as a Common Gateway Interface (CGI) executable.

On a web server, the result of the interpreted and executed PHP code – which may be any type of data, such as generated HTML or binary image data – would form the whole or part of an HTTP response. Various web template systems, web content management systems, and web frameworks exist which can be employed to orchestrate or facilitate the generation of that response.

Additionally, PHP can be used for many programming tasks outside the web context, such as standalone graphical applications and robotic drone control. PHP code can also be directly executed from the command line.

- HTML (Hyper Text Markup Language)

The Hyper Text Markup Language or HTML is the standard markup language for documents designed to be displayed in a web browser. It is often assisted by technologies such as Cascading Style Sheets (CSS) and scripting languages such as JavaScript.

Web browsers receive HTML documents from a web server or from local storage and render the documents into multimedia web pages. HTML describes the structure of a web page semantically and originally included cues for its appearance. HTML elements are the building blocks of HTML pages. With HTML constructs, images and other objects such as interactive forms may be embedded into the rendered page. HTML provides a means to create structured documents by denoting structural semantics for text such as headings, paragraphs, lists, links, quotes, and other items. HTML elements are delineated by tags, written using angle brackets.

- CSS (Cascading Style Sheets)

Cascading Style Sheets (CSS) is a style sheet language used for describing the presentation of a document written in a markup language such as HTML or XML (including XML dialects such as SVG, MathML or XHTML).

CSS is a cornerstone technology of the World Wide Web, alongside HTML and JavaScript.

- JavaScript

JavaScript is a programming language that is one of the core technologies of the World Wide Web, alongside HTML and CSS . As of 2022, 98% of websites use JavaScript on the client side for webpage behavior, often incorporating third-party libraries.

All major web browsers have a dedicated JavaScript engine to execute the code on users' devices.

- SECURITY

With built-in Windows authentication and pre-application configuration, you can be assured that your applications are secure.

BACK END

- MySQL Server

MySQL is an open-source relational database management system (RDBMS). Its name is a combination of "My", the name of co-founder Michael Widenius's daughter My, and "SQL", the acronym for Structured Query Language.

A relational database organizes data into one or more data tables in which data may be related to each other these relations help structure the data. SQL is a language programmers use to create, modify and extract data from the relational database, as well as control user access to the database.

In addition to relational databases and SQL, an RDBMS like MySQL works with an operating system to implement a relational database in a computer's storage system, manages users, allows for network access and facilitates testing database integrity and creation of backups.

- PhpMyAdmin

PhpMyAdmin is a free and open-source administration tool for MySQL and MariaDB.

As a portable web application written primarily in PHP, it has become one of the most popular MySQL administration tools, especially for web hosting services.

CHAPTER 5

5. SYSTEM TESTING

Method Accepted for system testing

System testing is the stage of implementation, which is aimed at ensuring that the system works accurately and efficiently before leave operation commences. An elaborate testing of data is prepared and the system is based using the test data. While testing errors noted and corrections are measured. The users are trained to operate the developed system.

Testing objectives:

Testing is a process of executing a program with the intent of finding an error. Good test case is one that has a probability of finding an as yet undiscovered error. A successful test is one that uncovers an uncovered error.

Testing Principle:

All tests should be traceable to end user requirements. Tests should be planned before long test begins. Testing should begin on small scale and progress towards testing in large. Exhaustive testing is not possible. To be most effective, testing should be conducted by an independent party.

Testing strategies:

A strategy for software testing integrates software test cases into a series of well-planned steps that result in a successful construction of software. Software testing is a broader topic for what is referred to as verification and validation. Verification refers to the set of activities that ensure that the software that has been built is traceable to customer's requirements.

Testing Steps:

- Unit Testing
- Integration Testing
- Acceptance Testing

Unit Testing

Unit testing means testing each units of design separately. Here in this project, we tested each unit of design separately and verify that there were no errors. For this testing each design is run individually After executing each page if there any error occurs correction mechanism is done instantly.

Integration Testing

In our project we combine many units module to form a sub system. These sub systems are then tested. This is done to see whether the modules can be integrated properly. Based on integration testing some changes made to the design.

Acceptance testing

The goal of acceptance testing is to see if the software meets all the requirements as needed. The testing was performed by data of all the users of the system. It was found that the software meets all the requirements of the students, teachers, administrator and placement officer as needed.

CHAPTER 6

6. SOURCE CODE

```
//Login page

<?php
include './constant/connect.php';
//session_start();
$user_id_auth = ltrim($_POST['user_id_auth']);
$user_id_auth = rtrim($user_id_auth);
//echo $user_id_auth;exit;

$pass_key = ltrim($_POST['pass_key']);
$pass_key = rtrim($_POST['pass_key']);

$user_id_auth = stripslashes($user_id_auth);
$pass_key     = stripslashes($pass_key);

//echo $pass_key;exit;

if($pass_key=="" &&  $user_id_auth==""){
  echo "<head><script>alert('Username and Password cannot be
empty');</script></head></html>";
            echo "<meta http-equiv='refresh' content='0; url=index.php'>";
```

```
}
else if($pass_key=="" ){
   echo "<head><script>alert('Password cannot be
empty');</script></head></html>";
            echo "<meta http-equiv='refresh' content='0; url=index.php'>";

}
else if($user_id_auth=="" ){
   echo "<head><script>alert('Username cannot be
empty');</script></head></html>";
            echo "<meta http-equiv='refresh' content='0; url=index.php'>";

}

else{

$user_id_auth = mysqli_real_escape_string($con, $user_id_auth);
$pass_key     = mysqli_real_escape_string($con, $pass_key);
$sql          = "SELECT * FROM admin WHERE username='$user_id_auth' and
pass_key='$pass_key'";
$result       = mysqli_query($con, $sql);
$count        = mysqli_num_rows($result);
if ($count == 1) {
```

```
$row = mysqli_fetch_assoc($result);
session_start();
// store session data
$_SESSION['user_data']  = $user_id_auth;
$_SESSION['logged']     = "start";
$_SESSION['full_name']  = $user_id_auth;
$_SESSION['username']=$row['Full_name'];?>

    <div class="popup popup--icon -success js_success-popup popup--visible">
  <div class="popup__background"></div>
  <div class="popup__content">
   <h3 class="popup__content__title">
    Success
   </h1>
   <p>Login Successfully</p>
   <p>
    <!--  <a href="index.php"><button class="button button--success" data-
for="js_success-popup"></button></a> -->
    <?php echo "<script>setTimeout(\"location.href =
'./admin/dashboard.php';\",1500);</script>"; ?>
   </p>
  </div>
</div>
<?php }
```

```
else {?>

  <div class="popup popup--icon -error js_error-popup popup--visible">
  <div class="popup__background"></div>
  <div class="popup__content">
    <h3 class="popup__content__title">
      Warn
    </h1>
    <p>Username OR Password is Invalid</p>
    <p>
      <a href="index.php"><button class="button button--error" data-for="js_error-
popup">Close</button></a>
    </p>
  </div>
</div>

<?php }
}
?>
```

#DB CONNECTION

```
<?php
$host     = "localhost"; // Host name
$username = "root"; // Mysql username
$password = ""; // Mysql password
$db_name  = "mayuri_fitness"; // Database name

// Connect to server and select databse.
$con = mysqli_connect($host, $username, $password, $db_name);
// Check connection
if (!$con) {
   echo "Failed to connect to MySQL: " . mysqli_connect_error($con);
}
?>
```

CHAPTER 7

7. SCREEN SHOTS

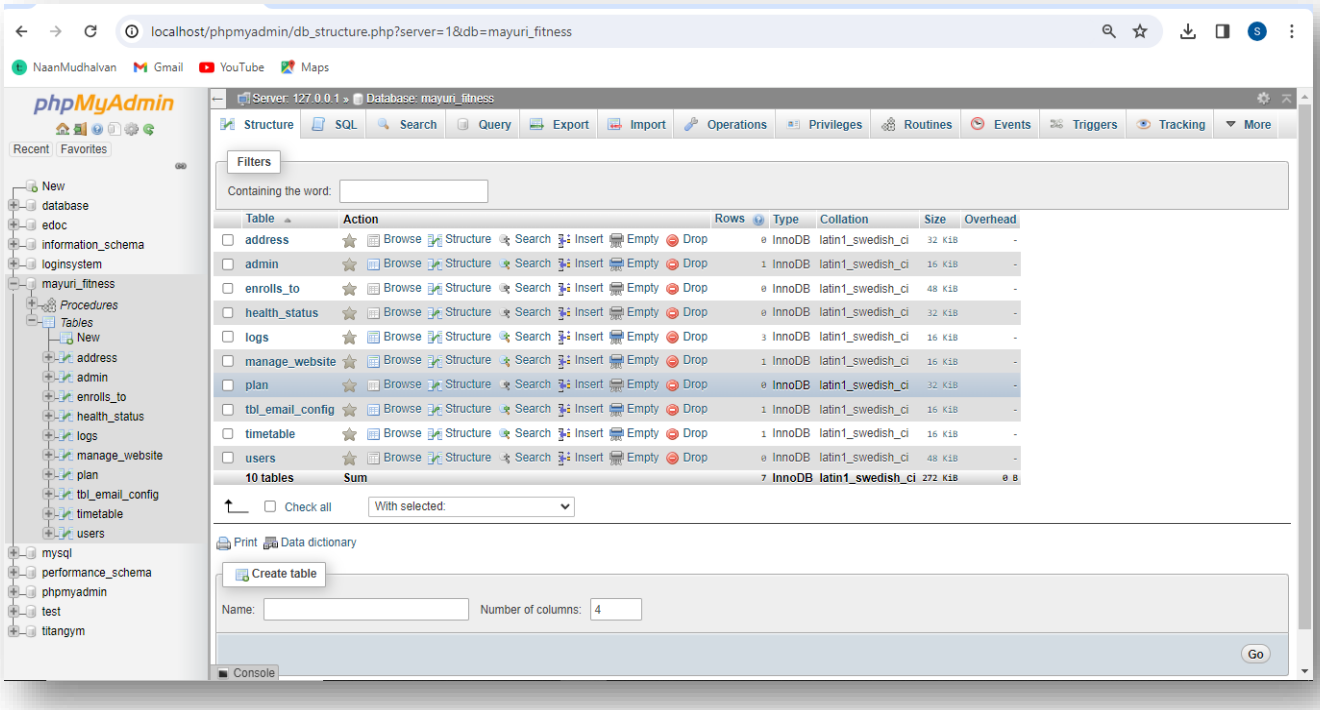


Fig 6.1: **PhpMyAdmin DATABASE**

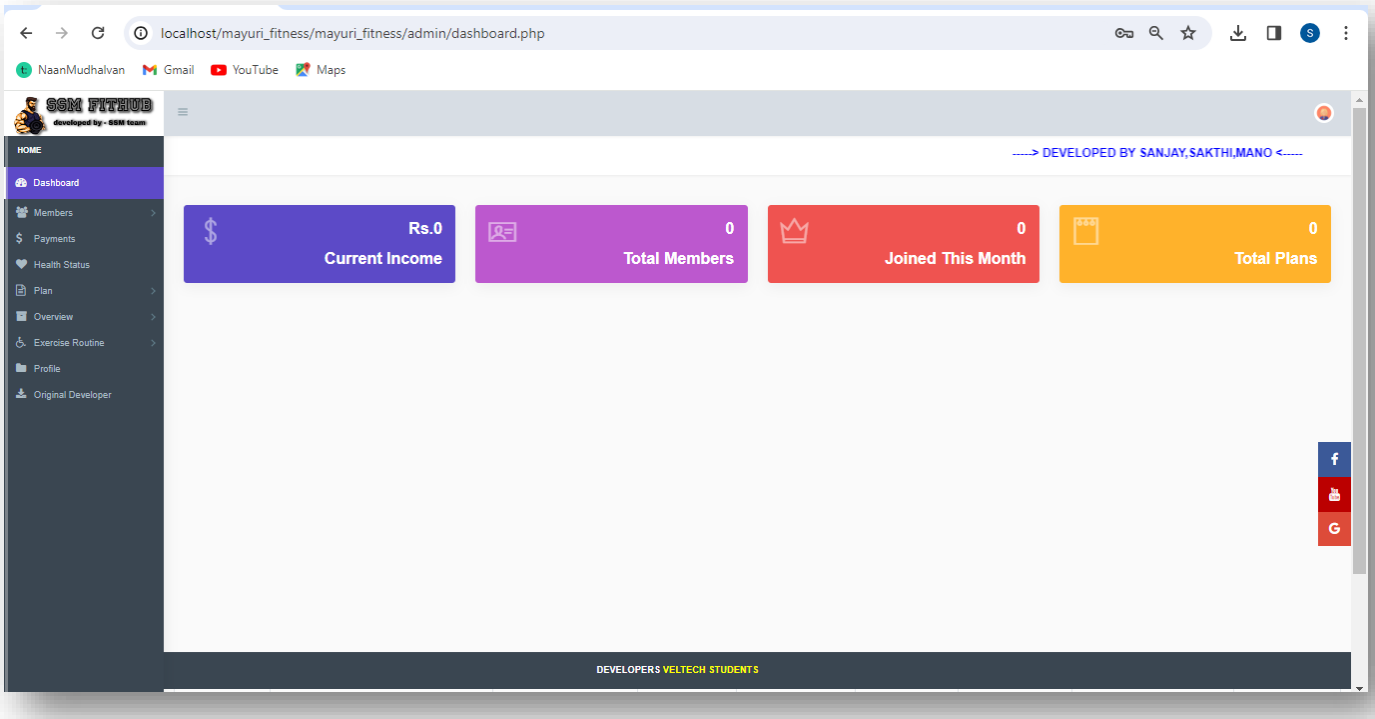


Fig 6.2: **HOME PAGE & DASHBOARD**

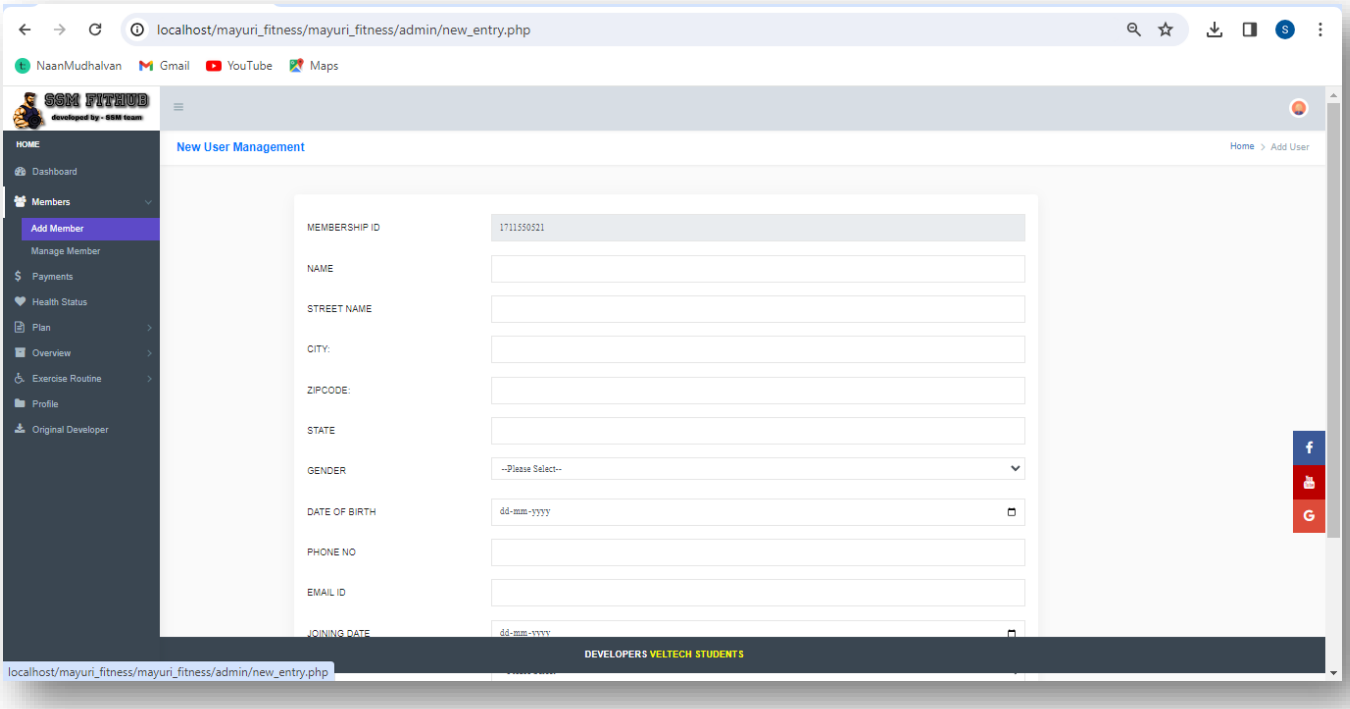


Fig 6.3.1: ADD MEMBER

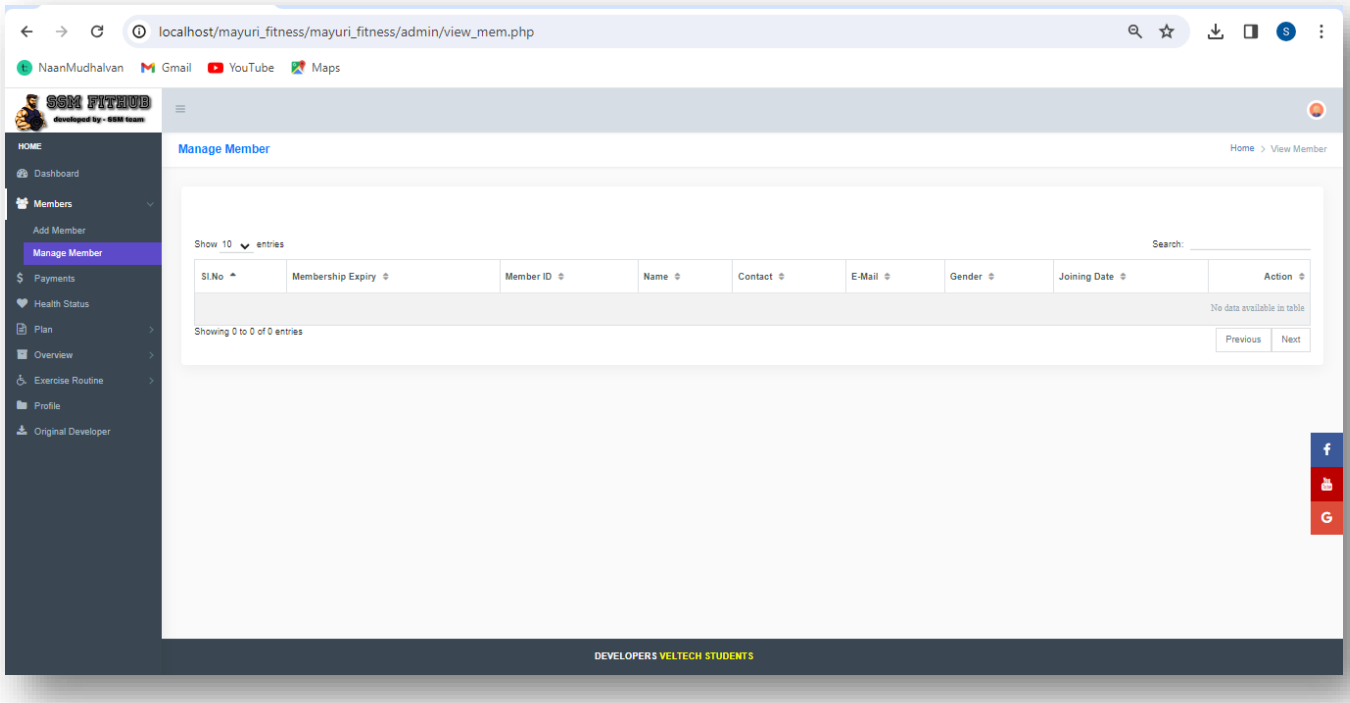


Fig 6.3.1: ADD MEMBER

***Fig 6.3:* MEMBER**

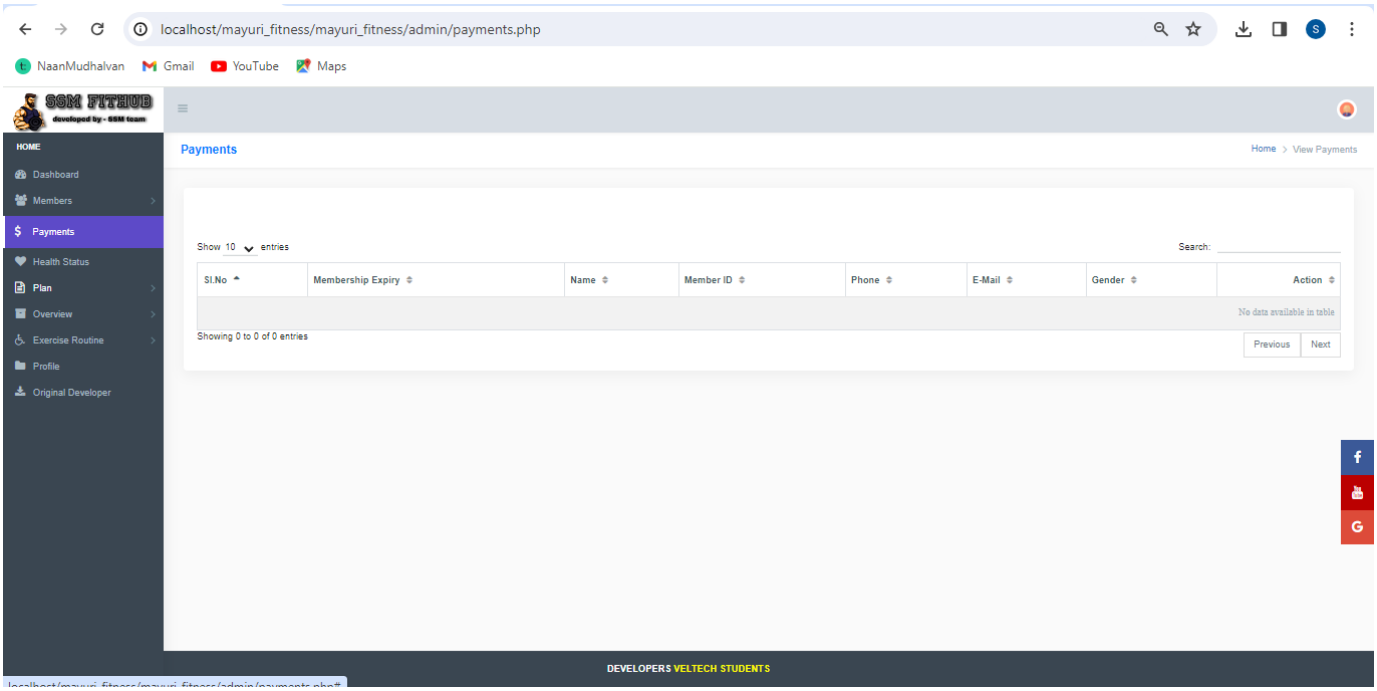


Fig 6.4: **PAYMENT**

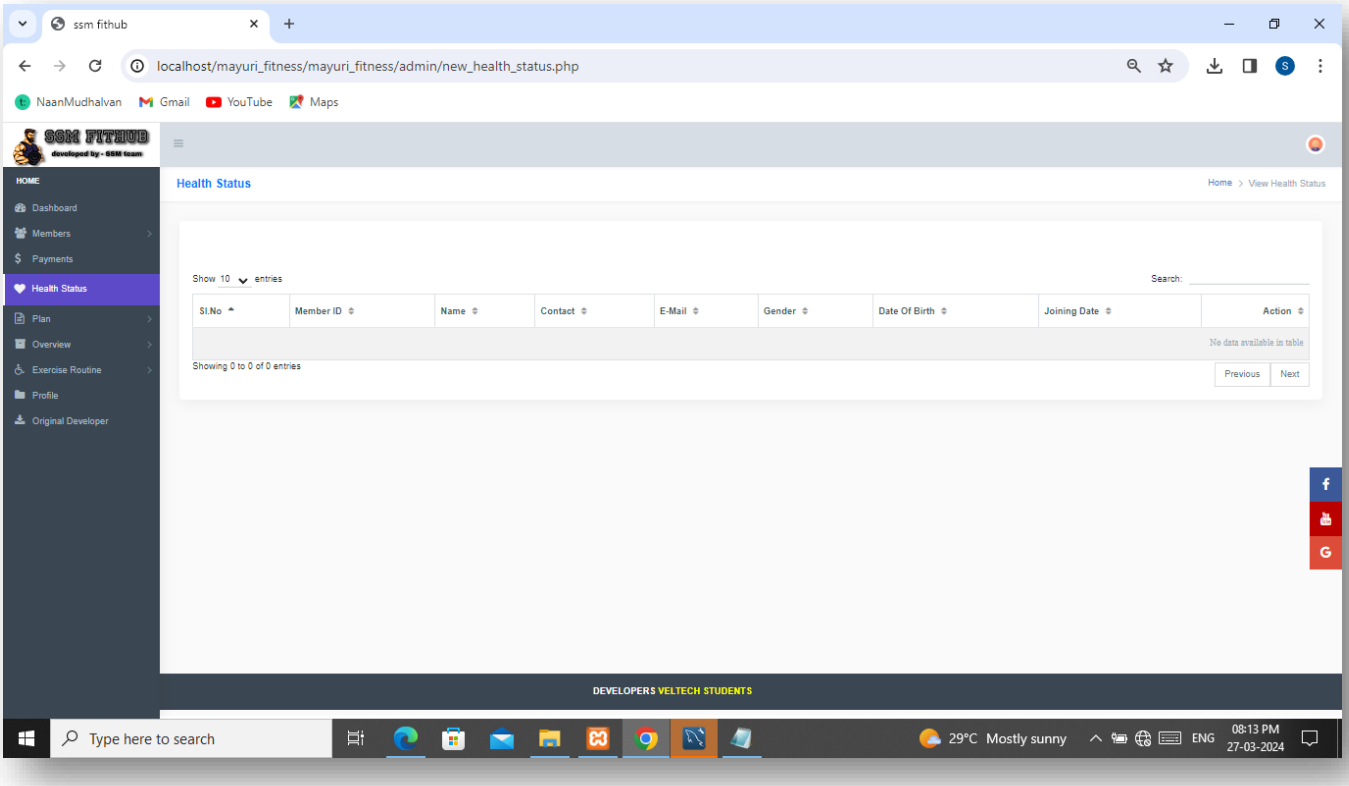


Fig 6.5: **HEALTH STAT**

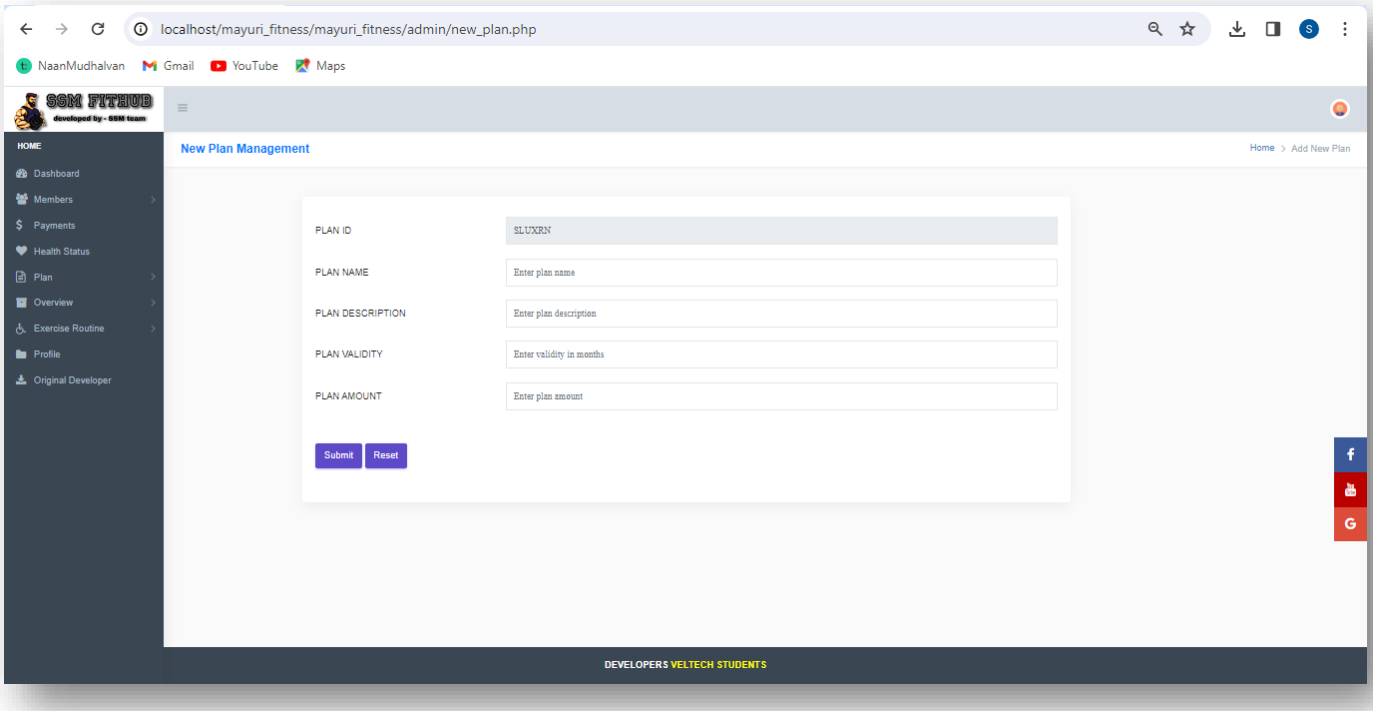


Fig 6.6.1: NEW PLAN

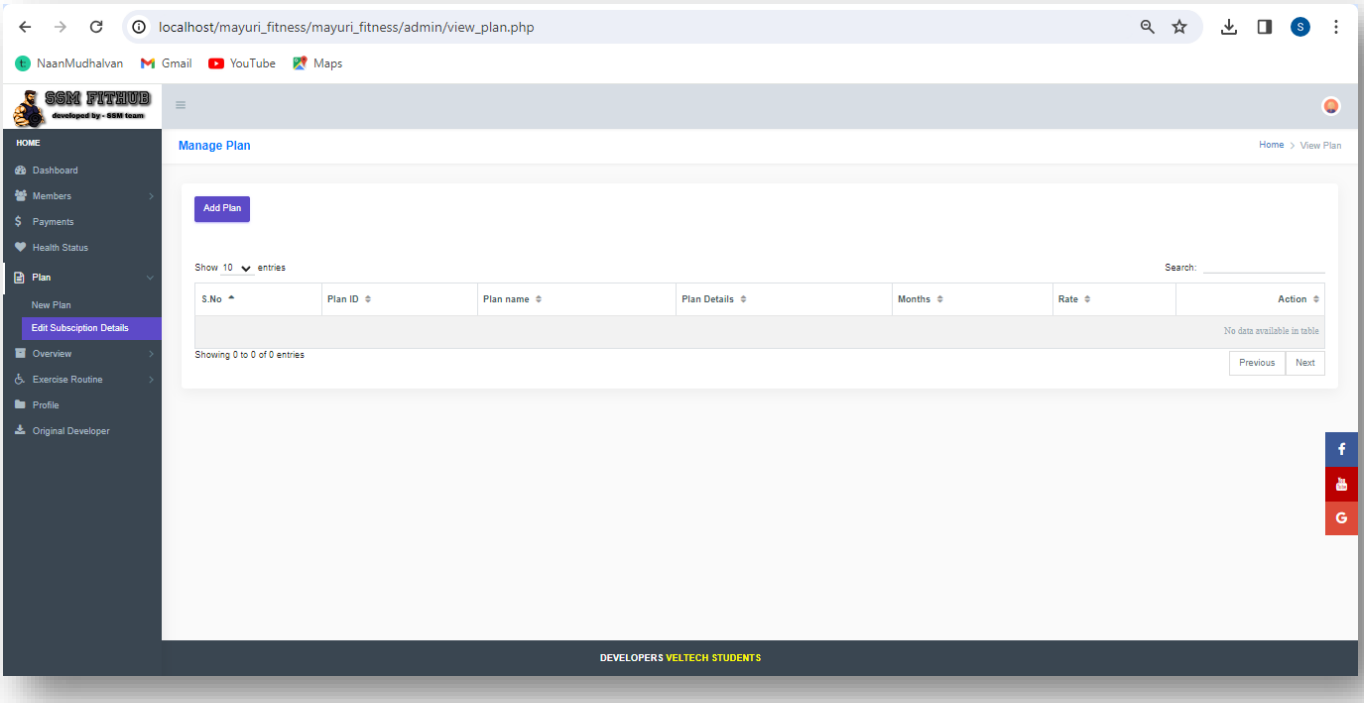


Fig 6.6.2: EDIT PLAN

***Fig 6.6:* PLAN**

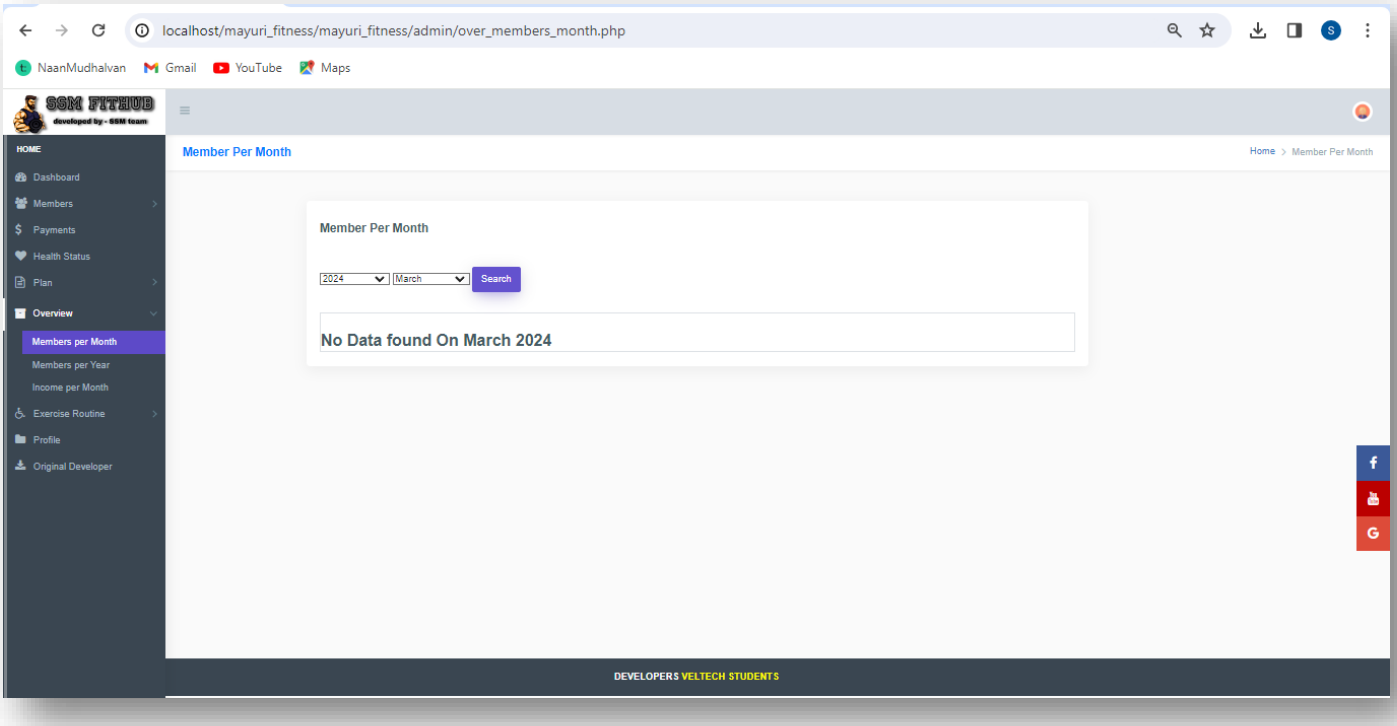


Fig 6.7.1: MEMBER PER MONTH

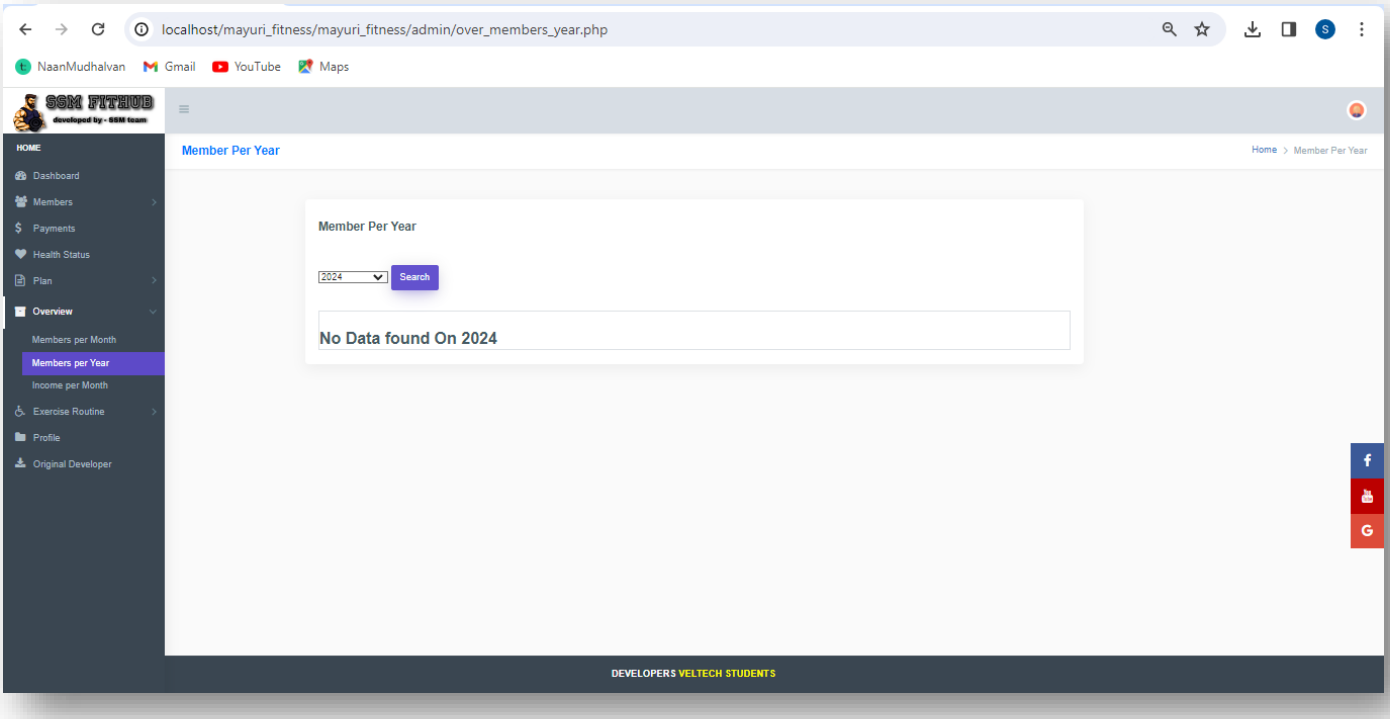


Fig 6.7.2: MEMBER PER YEAR

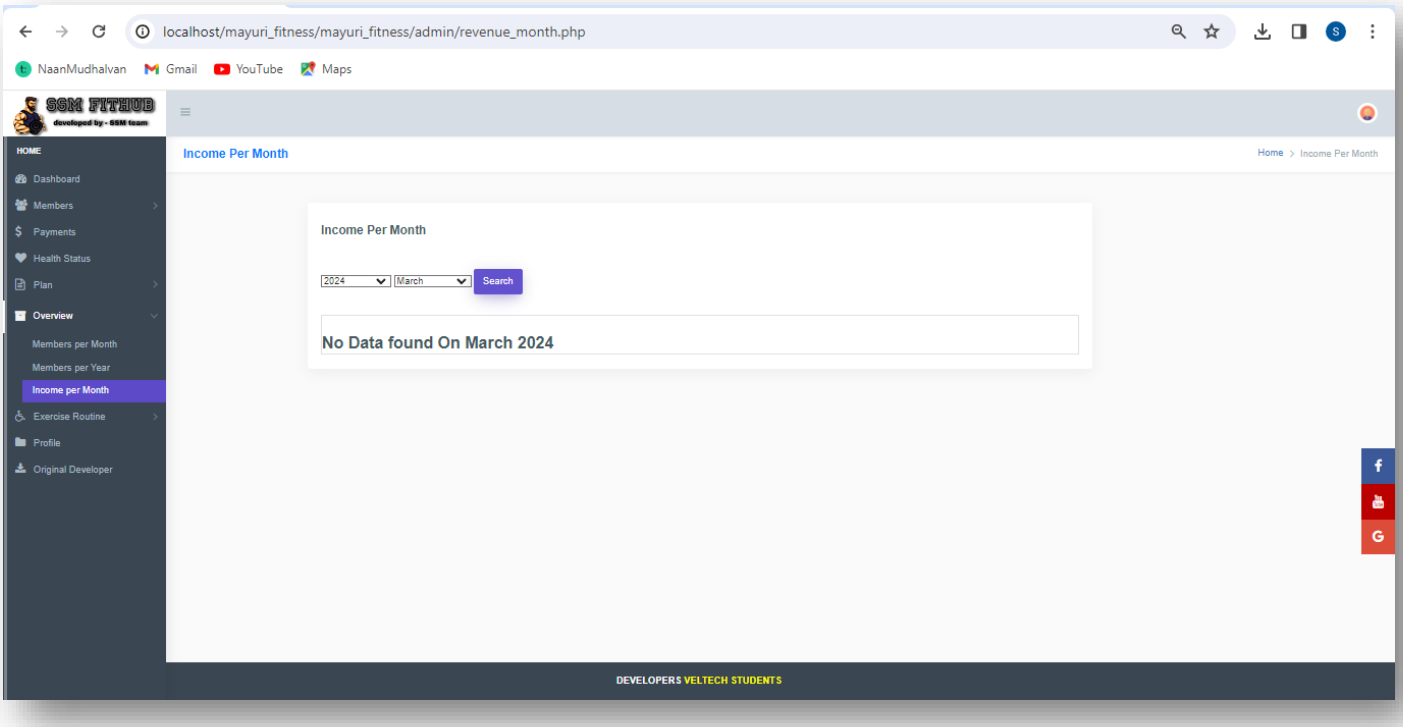


Fig 6.7.3: INCOME PER MONTH

Fig 6.7: **OVERVIEW**

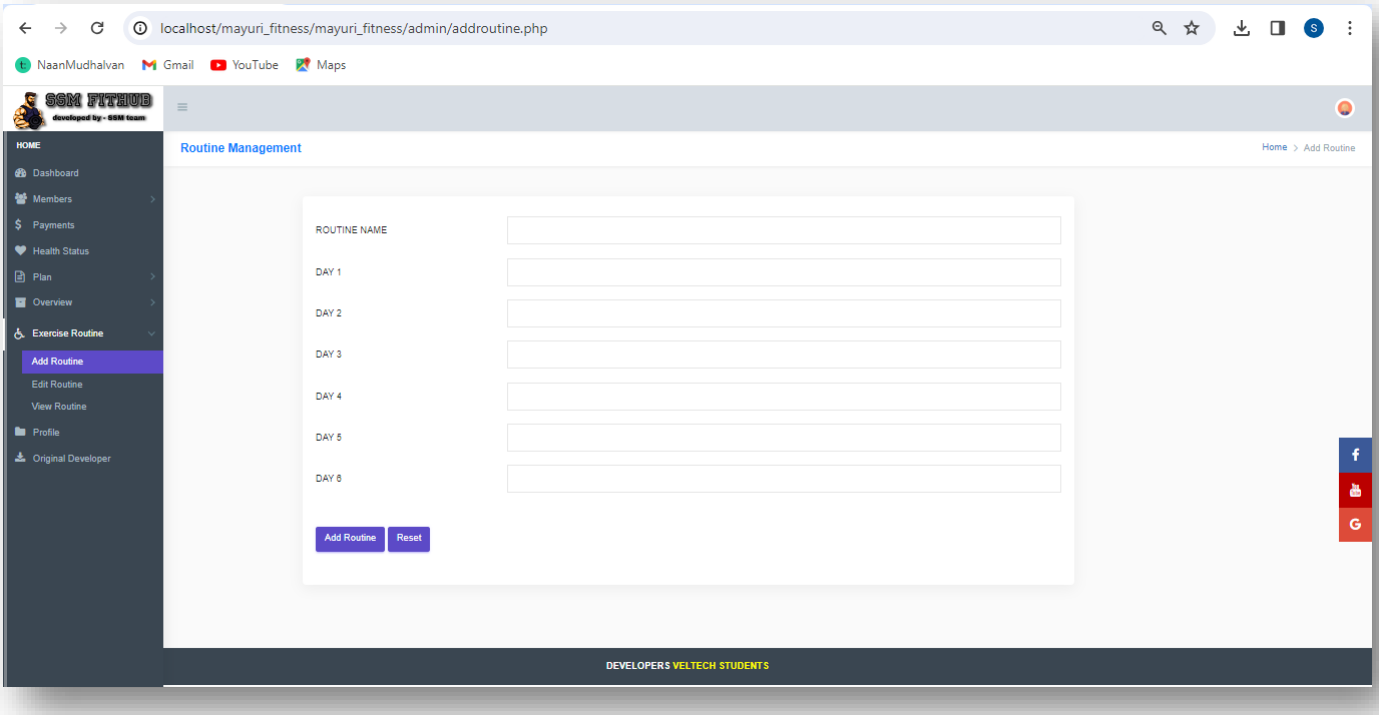


Fig 6.8.1: ADD ROUTINE

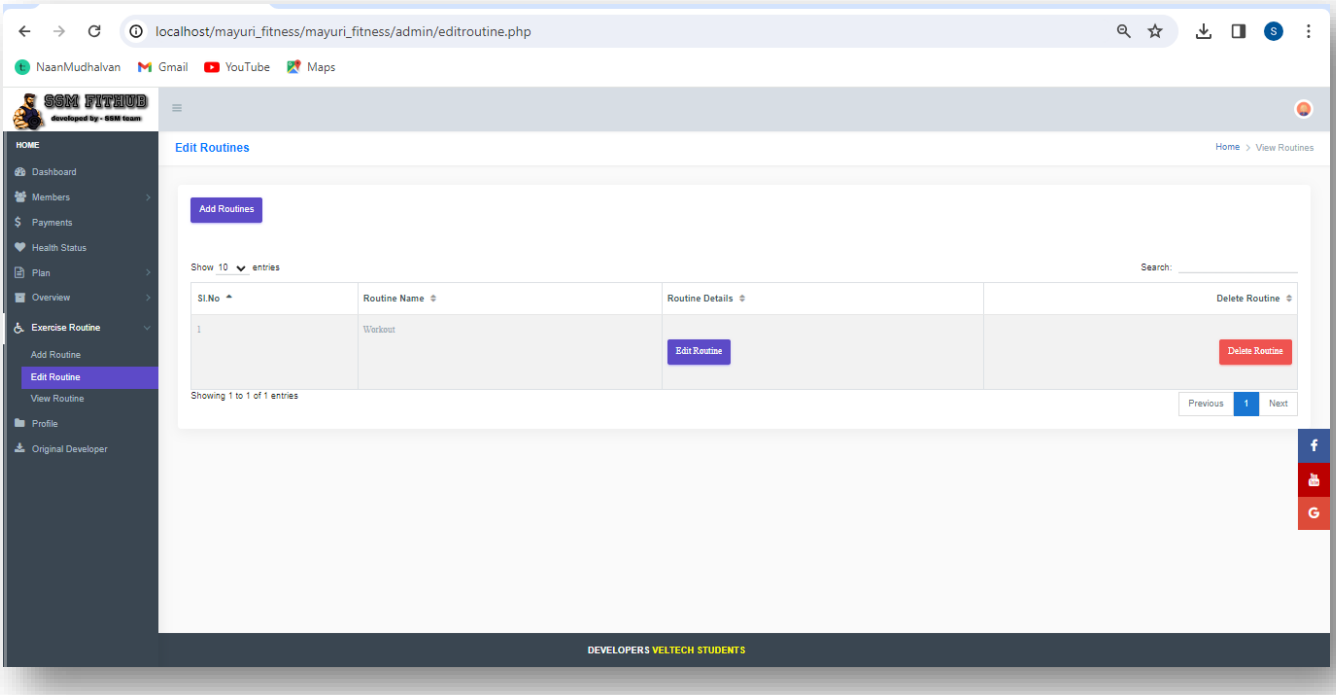


Fig 6.8.2: EDIT ROUTINE

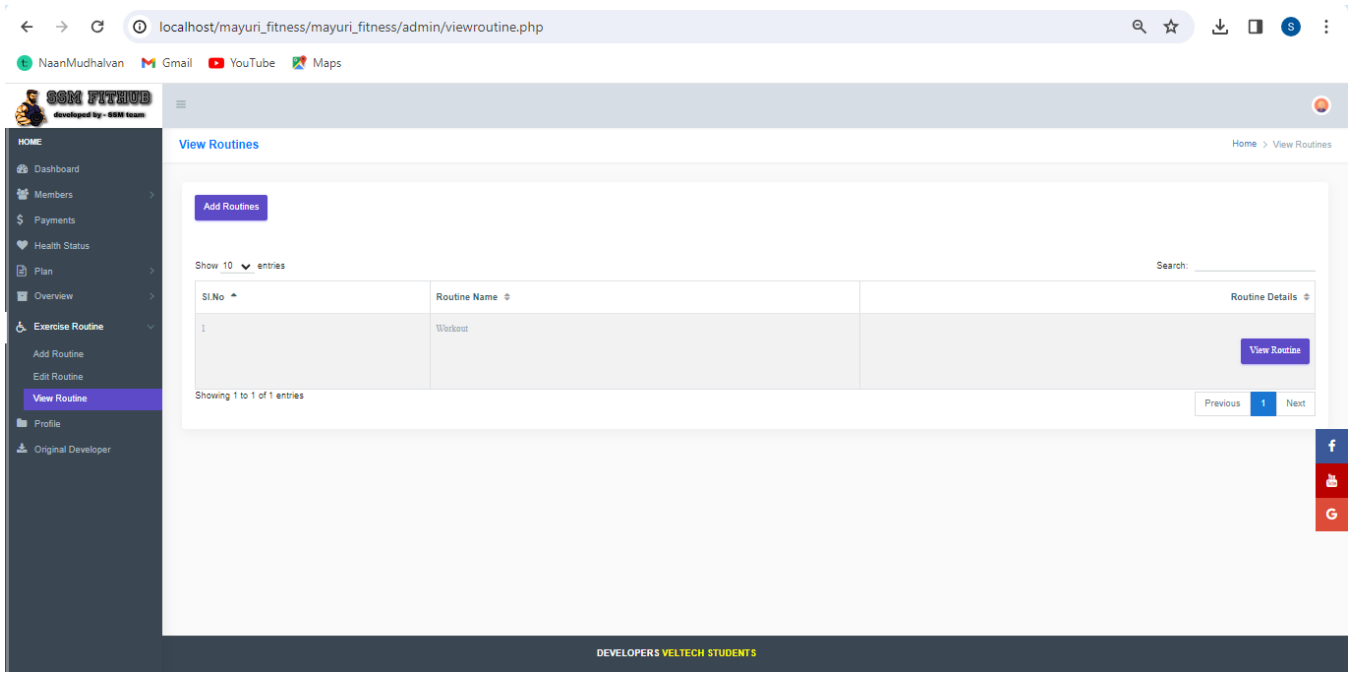


Fig 6.8.3: VIEW ROUTINE

Fig 6.8: **ROUTINE**

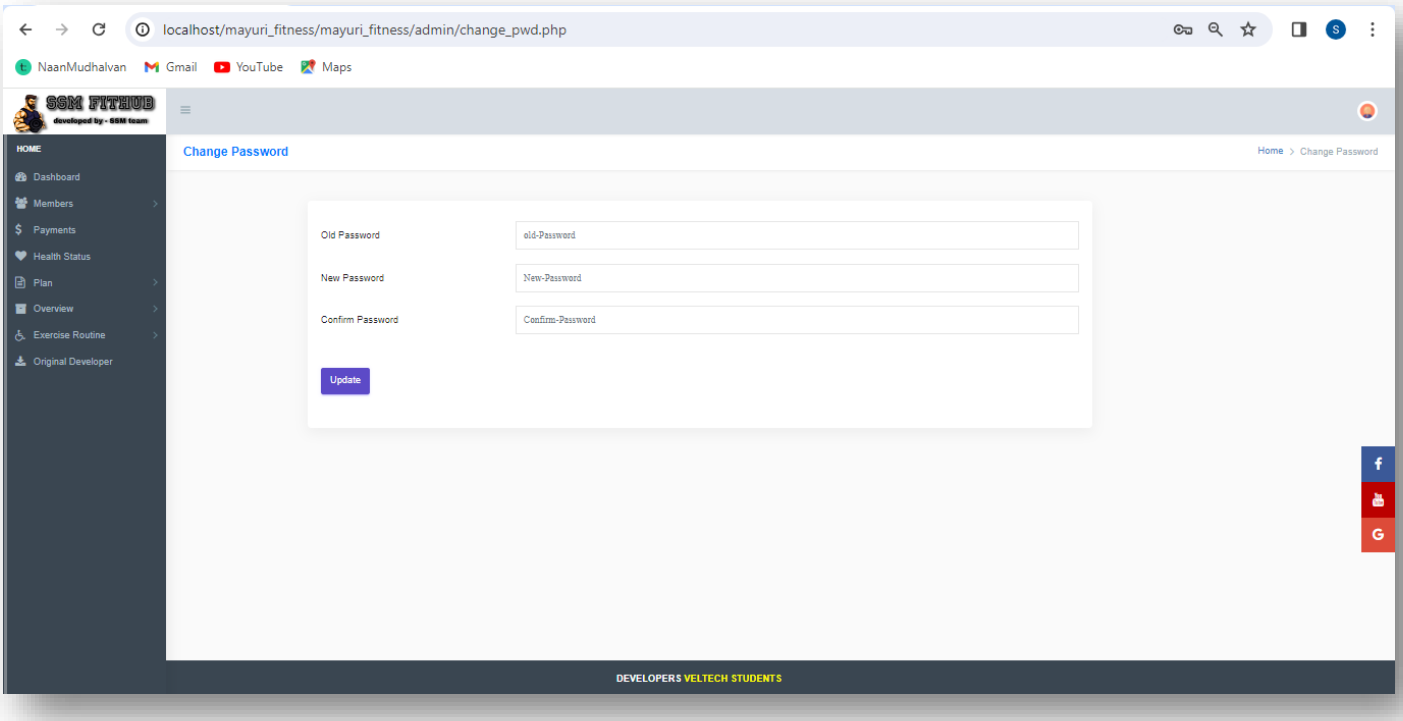


Fig 6.9: **PASSWORD RESET**

CHAPTER 8

8. CONCLUSION

This project was successfully completed, within the time span allotted. All the modules are tested separately and input together to form the main system. Finally, the system is tested with real data and everything worked successfully. Thus, the system has fulfilled the entire objective identified. The system had been developed in an attractive dialogue fashion. So, the user with minimum awareness about computers can also operate our site easily.

In future, our project will be able to access through the Internet. So that, many of the people can be use our website connectively for their purposes. And then, the limitation of our project which is that the payment transaction will be sorted out.

9. BIBLIOGRAPHY

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WEBSITES USED FOR RUNNING THE APPLICATION

1. *localhost/PhpMyAdmin/ (Authentication Users)*
2. www.apachefriends.org/download.html *(Xampp Server)*